

[Document Name] Abstract

[Abstract]

[Objective]

To increase the outgoing efficiency of light generated in an organic luminous
5 layer of an organic electroluminescence element without decreasing the numerical
aperture.

[Problem Resolution Means]

A light-transmissive anode electrode layer 3, an organic luminous layer 4, and
a light-reflective cathode layer 5 are let exist on the whole surface of one pixel region.
10 On the anode layer 3, the organic luminous layer 4, and the cathode layer 5, slopes
62~64 are installed protruding from the anode layer 3 side to the cathode layer 5 side.
By this, light H generated in the organic luminous layer 4 and irradiated in parallel to
a cumulate surface of a cumulate body S is reflected by the slope 63 on the boundary
between the organic luminous layer 4 and the cathode layer 5 and let go out toward
15 the anode layer 3 side.

[Selected Figure] Figure 2

[Explanation of the labels]

1: Glass substrate
 1A: Glass substrate
 2: Projection made of an insulating material
 5 3: Anode layer (light-transmissive electrode layer) made of ITO
 4: Organic luminous layer
 5: Anode layer (light-reflective electrode layer)
 7: Projection
 10: Scanning line
 10 11: Signal line
 12: Common line
 13: Switching transistor
 14: Capacity
 15: Driving transistor
 15 15a: Source/drain electrode
 16a: Contact hole
 16: Insulating layer
 17: Bank
 18: Connecting plug
 20 31: First ITO layer (First thin film)
 32: Convex section made of ITO
 61: Slope of projection made of an insulating material
 62: Slope of a boundary between an anode layer and an organic luminous layer
 63: Slope of a boundary between an organic luminous layer and a cathode layer
 25 64a~64d: Slope of a cathode layer
 64e: Plane of a cathode layer
 71: Projection
 72: Projection
 E: Organic electroluminescence element
 30 H: Parallel irradiated light
 h: Protruding height of an organic luminous layer
 O: Central point of one pixel region
 S: Cumulate body